



United States Department of the Interior

BUREAU OF LAND MANAGEMENT

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Instruction Memorandum No. **CA-2013-004**
Expires: 9/30/2014

To: All BLM CA District and Field Managers

From: State Director

Subject: Revision of Guy Wire and Lighting Requirements for Tall Structures

This Instruction Memorandum replaces IM CA-2011-003. This Instruction Memorandum provides requirements for all structures requiring guy wires and lights (e.g., meteorological towers, cell phone towers) on BLM administered lands for which the approval of said structures is done with a Categorical Exclusion. This Instruction Memorandum applies to all new structures. This Instruction Memorandum applies to existing structures only when they are modified, retrofitted, or reinstalled. In order to use a Categorical Exclusion (CX) under NEPA, a project must not adversely affect species of special concern (e.g., species protected under the Endangered Species Act or Bald and Golden Eagle Protection Act). Tall, thin structures, such as meteorological towers, pose a collision risk to wildlife species. These potential impacts are subject to analysis under the National Environmental Policy Act (NEPA) prior to our granting of a Right-of-Way. The implementation of these measures reduces the collision risk for avian species sufficiently that a CX may be used. If the guidelines below are not implemented, a full NEPA analysis (EA or EIS) must be conducted.

A wide variety of bird species have been documented to collide with guy wires and power lines. It is generally believed that birds collide with lines because the lines are invisible to the birds or because the lines are not seen until it is too late for birds to avoid it. Large, less maneuverable birds are especially vulnerable to collisions with guy wires, which are relatively thin and difficult to see from a distance. Poor weather conditions, such as fog, rain or snow, as well as darkness, make the lines even more difficult to see. The following measures increase the visibility of such structures.

1. The use of self-supported structures (i.e., structures that do not require guy wires for support and stability) are preferred whenever feasible. The structure should be painted so that it stands out from the surrounding environment to provide optimum visibility for birds. However, if the use of self-supported structures is not feasible, non-self-support structures with guy wires may be used provided that the wires are marked using the following protocols.
2. Each and every guy wire (not just external wires) should be clearly marked for the length of the wire. Starting at the top of the guy wire, the first marker must be placed within the first 15 feet of length. The last marker can be no more than 15 feet from the ground at the end of the guy wire. Markers should be of a color that does not blend with the wire. Choice of marker and spacing of the markers along the guy

wire must use one of the following options.

- a. Spiral flight diverters (i.e., open-ended BIRD FLIGHT™ diverter or closed SWAN FLIGHT™ diverter or equivalent technology) spaced at intervals no greater than 15 feet apart.
- b. "FireFly™" 'flapper' secured with a dropped forged galvanized cable (u-bolt) clamp or equivalent technology, spaced at intervals no greater than 30 feet apart.
- c. In an alternating pattern, FireFly™ (or equivalent technology), and spiral flight diverters (e.g., open-ended BIRD FLIGHT™ diverter or closed SWAN FLIGHT™ diverter or equivalent technology) at spacing intervals of 15 feet apart.

Applicants must comply with manufacturer recommendations when using the methods outlined above. If an applicant proposes an alternative method of marking guy wires, that method must be approved by the BLM, and the applicant must conduct regular monitoring for bird fatalities (including scavenger and detectability correction factor studies) for all structures with guy wires.

3. Avoid placing lines within wetlands, over canyons, or within important avian movement corridors (i.e., between foraging and nesting sites).
4. Lights are sometimes used to mark guy wires and power lines. Because lights can both attract and confuse migrating birds, use lights only if lighting is needed for aviation safety. Unless otherwise requested by the Federal Aviation Administration, use only the minimum number of strobed, strobe-like, or blinking incandescent lights with a minimum intensity, maximum "off-phased" dual strobe lights. No steady burning lights (e.g., L-810) should be used. All lights should illuminate simultaneously.
5. If fatalities are observed, they must be reported immediately to the managing Field Office and the State Wildlife Specialist.

Questions on implementing measures for guy wires and lighting to reduce avian collisions may be directed to Amy Fesnock at (916) 978-4646.

Signed by:
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